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IMPORTANT DATES:

- Veterans Day
11 October
- Election Day
4 November
- Society for
Neuroscience
15-19 November
- Thanksgiving Day
27 November

Naval Health Research Center Quarterly Update

FALL 2008

HIV/AIDS Prevention Program

In 2000, the US Government initiated the Leadership and Investment in Fighting an Epidemic (LIFE) Initiative, which was an interagency effort between the Centers for Disease Control and Prevention (CDC), the United States Agency for International Development (USAID), and Department of Defense (DoD) to reduce the spread of HIV globally, with a particular focus on Africa and India. Under the direction of Naval Health Research Center's Operational Readiness Department, the DoD became a vital contributor to the interagency process of the global fight against HIV, using its extensive medical

experience of diagnosing, treating, and caring for HIV infected military personnel and its strategic experience in planning and organizing HIV policy. With the evolution of the US Government's fight against the global epidemic into the President's Emergency Plan for AIDS Relief (PEPFAR) in May of 2003, the Department of Defense HIV/AIDS Prevention Program (DHAPP) was created and Dr. Richard Shaffer assumed the role of Executive Director.

DHAPP's objectives are to: (1) assist in the development and implementation of military-specific HIV prevention, care and treatment programs in foreign military partners around the world; (2) integrate with and utilize other USG

programs dedicated to HIV/AIDS prevention, care and treatment, as well as with programs managed by allies and the United Nations; and (3) establish HIV/AIDS as a typical Security Cooperation Activity. Within that mission, DHAPP, as the executive agent for the DoD, has worked closely with CDC, USAID, the State Department, the Peace Corps, the Department of

Health and Human Services (HHS), the Department of Commerce (DoC), and the Department of Labor (DoL), as part of the interagency effort under PEPFAR. In early August of this year in a letter to Dr. S. Ward Casscells, Assistant Secretary of Defense for Health Affairs, the director of the CDC, Dr. Julie Gerberding, acknowledged the value of the contributions of the DoD to PEPFAR. She stated she had been

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Bombo Barracks, Uganda



Spotlight

Reporters from Chicago Herald, CNN, San Diego Union-Tribune, ABC News, HealthDay, NBC News, Voice of America, Associated Press, Ivanhoe Broadcast News, Reuters, Bloomberg Press, and many more have been calling NHRC for interviews with Ms. Isabel Jacobson regarding the publication on alcohol use among deployers.

Ms Jacobson's article was published in the Journal of the American Medical Association (JAMA 2008;300(6):663-675) on August 13th

and has attracted attention nationwide.

The research was derived from the Millennium Cohort Study, the largest prospective study in military history designed to gain a better understanding of the health effects of military service over time. The current study on alcohol use was designed to examine alcohol use at baseline prior to deployment and again at follow-up after deployment and to determine whether those who deployed with and without reported

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Awards



Left to Right: CAPT K. Thompson,
Brenda Crooks, CAPT G. Utz

Brenda M. Crooks, Commanding Officer's Secretary, was selected as a SAIGE Award recipient for her support of Native American/Alaskan Native programs, community outreach and enrichment, career development and sharing of her Native American culture. SAIGE stands for the Society of American Indian Government Employees.

Native American employment represents 1.9 percent (approximately 32,251) of the permanent Federal Workforce. The purpose of this award is to recognize agencies and individuals (civilian and military), who through their personal commitment and professional initiative have made demonstrable contributions in recruiting, retaining, and providing career advancement opportunities to American Indian employees in the Federal workforce, and who have assisted with the advancement of American Indian and Alaskan Native professionals, role models and future leaders.

Brenda was presented the award at the 5th Annual Training Conference, "Blessed by Tradition: Honoring Our Ancestors Through Government Service" on June 4th in Traverse City, Michigan.

After receiving this award, Brenda had made a special request to her tribal elders to present a gift to our Commanding Officer, CAPT Kerry Thompson for his nomination of her for this prestigious award. This request was granted by the elders and on July 2nd at the command awards ceremony, Brenda presented CAPT Thompson with an Eagle Feather from her tribe.

In the Native American culture, The eagle was given the honor of carrying the prayers of man between the world of earth and the world of spirit where our creator and the grandfathers reside. When one receives an Eagle Feather that person is being acknowledged with gratitude, with love, and with ultimate respect.



"The Founding Fathers made an appropriate choice when they selected the bald eagle as the emblem of the nation. The fierce beauty and proud independence of this great bird aptly symbolizes the strength and freedom of America." www.homeofheroes.com

To be given an eagle feather is the highest honor that can be awarded within aboriginal cultures.

Recent Publications & Presentations

Duncan JE, Corwin CH, Sweeney WB, Dunne JR, DeNobile JW, Perdue PW, Galarneau MR, Pearl JP. Management of Colorectal Injuries During Operation Iraqi Freedom: Patterns of Stoma Usage. *Journal of Trauma-Injury Infection & Critical Care*. 64(4):1043-1047, April 2008.

Faix DJ, Harrison DJ, Riddle MS, Vaughn AF, Yingst SL, Earhart K, Thibault G. Outbreak of Q Fever among US Military in Western Iraq, June-July 2005. *Clinical Infectious Diseases* 2008;46:e65-e68

Holbrook T, Galarneau M, Dye J, Wade A. presented a Navy-Marine Corps Combat Trauma Registry (Navy-MC CTR) Deployment Health Database poster titled "Morphine Use After Injury Protects Against PTSD Onset: Findings From the U.S. Navy-Marine Corps Combat Trauma Registry Deployment Health Database" at the Advanced Technology Applications in Combat Casualty Conference (ATACCC) in St.Petersburg, FL on 11-13 August 2008

Jacobson IG, Smith TC, Smith B, Wells TS, Reed RJ, Ryan MAK. US military service members vaccinated against smallpox in 2003 and 2004 experience a slightly higher risk of hospitalization postvaccination. *Vaccine*. Volume 26, Issue 32, 29 July 2008, Pages 4048-4056

Jacobson IG, Smith TC, Smith B, Wells TS, Reed RJ, Ryan MA. US military service members vaccinated against smallpox in 2003 and 2004 experience a slightly higher risk of hospitalization postvaccination. *Vaccine*. 2008 Jun 6. [Epub ahead of print]

Lobjois R, Benguigui N, Bertsch J, Broderick MP. Collision avoidance behavior as a function of aging and tennis playing. *Experimental Brain Research* (2008) 184:457-468.

Lyons A, Longfield J, Kuschner R, Straight T, Binna L, Seriwatana J, Reitstetter R, Froh IB, Craft D, McNabb K, Russell K, Metzgar D, Liss A, Sun X, Towle A, Sun W. A double-blind, placebo-controlled study of the safety and immunogenicity of live, oral type 4 and type 7 adenovirus vaccines in adults. *Vaccine*. Volume 26, Issue 23, 2 June 2008, Pages 2890-2898.

Mohr SB, Garland CF, Gorham ED, Grant WB, Garland FC. Relationship between Low Ultraviolet B Irradiance and Higher Breast Cancer Risk in 107 Countries. *Breast Journal*. 14(3):255-260, May/June 2008.

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HIV/AIDS (cont.)



CIS Delegation, Moscow

"deeply honored to work side-by-side" with the DoD in these efforts.

While DHAPP oversees funding to provide HIV training for military personnel worldwide, the Military International HIV Training Program provides an excellent example of DHAPP's collaboration at the local level. In conjunction with University of California, San Diego, San Diego State University, and NMCSD, DHAPP provides training in San Diego for medical personnel from foreign militaries. Since 2002, 117 military clinicians (98 clinicians, 3 nurses and 16 auxiliary health care professionals) from 30 countries around the world have attended 21 sessions of the Military International HIV/AIDS Training Program in San Diego.

On July 30, 2008, the Tom Lantos and Henry J Hyde United States Global Leadership Against HIV/AIDS, Tuberculosis, and

Malaria Reauthorization Act (HR5501) was signed into law by President George W. Bush, with Dr. Shaffer in attendance representing the contributions to efforts by the DoD. This legislation represents a continuation of HIV efforts under PEPFAR, and with a budget of \$48 billion over the next five years will work toward the creation of sustainable programs in the countries that PEPFAR assists. In FY07 alone, as part of its support of PEPFAR, DHAPP has trained 895 clinicians on ART techniques and a total of 9,238 health care workers in various HIV capacities, equipped and supported 83 HIV laboratories, established 10,306 new individuals on ART, trained 10,553 peer educators, trained 1,773 senior military members on HIV policy issues, and sent 28 American military personnel on temporary duty to provide technical assistance to host-country militaries, among its many other accomplishments. Under the expert direction of Dr. Richard Shaffer, the Department of Defense will continue to make valuable contributions to this effort and to make sure that host-country military needs and national security interests are being properly integrated into HIV strategies.



Dr. Shaffer discussing HIV with kids in Ethiopia

Recent Pubs and Presentations (cont.)

Ryan MA, Gumbs GR, Conlin AM, Seveck CJ, Jacobson IG, Snell KJ, Spooner CN, Smith TC. Evaluation of preterm births and birth defects in liveborn infants of US military women who received smallpox vaccine. Birth defects research. Part A, Clinical and molecular teratology. 2008 Jul;82(7):533-9.

Ryan MA, Smith TC, Seveck CJ, Honner WK, Loach RA, Moore CA, Erickson JD. Birth Defects among Infants Born to Women Who Received Anthrax Vaccine in Pregnancy. American Journal of Epidemiology. 2008 Jul 2. [Epub ahead of print]

Smith B, Chu LK, Smith TC, Amoroso PJ, Boyko EJ, Hooper TI, Gackstetter GD, Ryan MAK; for the Millennium Cohort Study Team. Challenges of self-reported medical conditions and electronic medical records among members of a large military cohort. BMC Medical Research Methodology, 2008; 8:37.

Smith TC, Smith B, Ryan MAK. Prospective investigation of complementary and alternative medicine use and subsequent hospitalizations. BMC Complementary and Alternative Medicine 2008, 8:19.

Smith TC, Ryan MA, Smith B, Gackstetter GD, Wells TS, Amoroso PJ, Hooper TI, Boyko EJ; for the Millennium Cohort Study Team. RE: "Psychiatric Diagnoses in Historic and Contemporary Military Cohorts: Combat Deployment and the Healthy Warrior Effect". American Journal of Epidemiology. 2008 Sep 5. [Epub ahead of print]

Smith TC presented a brief at the Israel Bilateral Medical R&D Symposium (AKA Shores) Conference on Military Medicine, regarding the Millennium Cohort Study and other deployment health related studies in Baltimore, MD on 8 September 2008.

Taylor MK, Markham AE, Reis JP, Padilla GA, Potterat EG, Drummond SP, Mujica-Parodi LR. Physical fitness influences stress reactions to extreme military training. Military Medicine. 2008 Aug;173(8):738-42.

Wise SK, Ghegan MD, Gorham ED, Schlosser RJ. Socioeconomic factors in the diagnosis of allergic fungal rhinosinusitis. Otolaryngology - Head and Neck Surgery. Volume 138, Issue 1, January 2008, Pages 38-42.

Spotlight (Cont.)



deployed populations with and without reported combat exposures was nondeployed personnel. Results from this study

combat exposures in support of the wars in Iraq and Afghanistan were at higher risk for new-onset or continued alcohol use postdeployment. The comparison group for the

showed that the prevalence of alcohol use remained quite stable from baseline to follow-up, and that Reserve and National Guard personnel that deployed with reported combat exposures were at increased risk for new-onset of alcohol use behaviors at follow-up compared to nondeployed personnel. The study also found that younger service members, those born in 1980 or later, were at increased risk for all alcohol use behaviors at follow-up, compared to those born before 1960.

For more information on the Millennium Cohort Study, please visit www.MillenniumCohort.org.

Notable News

NHRC's very own Judy Dye from the Medical Modeling, Simulation and Mission Support Department recently returned from a 6-week humanitarian assistance mission aboard the USNS Mercy (T-AH 19). Judy is a Reserve Nurse Corps officer attached to Naval Medical Center San Diego.

While serving on board the Mercy, Judy was assigned to Ward 1, the adult surgical ward. She also participated in Medical Civil Action Programs (MEDCAPs) in Papua New Guinea and visited the local hospital in Micronesia as a subject matter expert to present educational offerings to the local doctors and nurses.

Following a four-month tour to five nations, and helping

thousands of people while also supporting the U.S. Maritime Strategy, the Mercy arrived on Guam Sept. 3.

Mercy was the platform for Pacific Partnership 2008, a humanitarian mission to Philippines, Vietnam, Timor-Leste, Federated States of Micronesia and Papua New Guinea. The mission helped build collaborative relationships by providing engineering, civic, medical and dental assistance to the nations.

Mercy has taken part in humanitarian missions to some of the region's largest natural disasters including the 2004 tsunami in Indonesia. www.navy.mil/local/guam



CAPT Kerry Thompson
Commanding Officer

Command Corner

"You may or may not be aware that CDR Dave Service recently returned from Afghanistan on a vitally important research mission. Upon his return I asked him to write his thoughts about the value/significance of our research mission."

- CAPT K. Thompson

Immediate Gratitude & Operational Relevance

The mission statement of NHRC states that we develop and deliver operational biomedical research solutions that enhance the health, safety, readiness, and performance of military forces. As inspiring and ambitious as that sounds, I believe those words actually do a great job of characterizing the meaningful work we do across the NHRC enterprise. One challenge we face in military medical research is that we are typically separated by time and distance from the people we are ultimately striving to serve; the joint warfighter. Because of

the time it takes to collect, analyze and report data and findings, we often don't see the operational relevance of our work. Furthermore, it's not uncommon for Sailors and Marines we meet during the initial phases of a study to transfer or even leave the service by the time we complete our projects, meaning that no personal connection remains to help us put our findings in perspective. This isn't a daunting challenge by any means, but I sense that it's a factor that may make our research mission seem less urgent or less crucial to the war effort than other more immediate contributions such as the care of wounded troops. Nothing could be further from the truth. Occasionally we have the opportunity to become more immersed in a study and get a tangible sense of our efforts. Dr. Jerry Larson and the NHRC Behavioral Science and Epidemiology Department recently responded to just such an opportunity.

In June, CDR Dave Service, MSC, USN and Dr. Heidi Kraft travelled to Bagram Afghanistan to collect data for the Navy's ongoing Behavioral Health Needs Assessment, (BHNAS). As many of you know, BHNAS is a project conceived and executed by NHRC in response to a requirement issued

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Command Corner (cont.)

directly by the Chief of Naval Operations back in 2006. As a member of the Joint Chiefs of Staff, the CNO was aware of issues plaguing U.S. Army Soldiers in OIF and OEF but realized he didn't have similar insight into the mental health status of expeditionary Sailors serving on the ground in Iraq and Afghanistan. BHNAS was quickly launched, and initial findings were being briefed to the Surgeon General and CNO within months. While the data collected in Iraq in 2007 indicated that many Sailors were performing well on the ground, it was clear that others were at risk. In particular, many Individual Augmentees or "IAs" assigned to guard duty in prison facilities similar to Abu Ghraib appeared to be acutely stressed. Based on that finding, the Vice Chief of Naval Operations issued a classic epidemiological challenge; was it something about the people, the place, or the circumstances of the assignment that was impacting the IA guard force, or was it a random observation? To get the answer, Dr. Kraft, as well as CAPT Koffman, and LT Campbell from BUMED, joined me to go "down range" to have a closer look.

Along with Combat & Operational Stress Control leaders from BUMED, the NHRC team arranged to evaluate the Theater Internment Facility at Bagram Air Base in Afghanistan; the site of the largest concentration of captured Taliban fighters and suspected enemy combatants in the country. After conducting preparatory work in Kuwait, the team spent two weeks in Bagram

interviewing the Navy guard force, observing detainee operations inside the facility, and collecting objective data to infuse BHNAS. While those data are still being formally processed, what the team saw made several things abundantly clear to them as researchers: The roles that many Navy IA's are playing in the Global War on Terrorism are completely non-traditional and often unexpected. Moreover, many assignments are unpleasant, difficult, and dangerous even when they don't involve direct engagement with the enemy. During the course of the BHNAS team's mission the base was targeted by a rocket attack, and five coalition troops were killed in action in the surrounding area. However our colleagues determined that for most IA guards, the most deleterious sources of stress weren't bullets and rockets, they were things affecting them "inside the wire." To say this was an unexpected observation is an understatement.

The details of the BHNAS team's observations in Afghanistan have already been briefed in Washington DC, and contributed to action that resulted in immediate change at the internment facility. Although this is far from being a common scenario, NHRC's leadership in this realm is just one example of the operational significance and real-time value that Medical R&D has on the readiness and effectiveness of our forces.

- CDR D. Service